

Ptilorhis paradisea (the N.S.W. Rifle bird) was plentiful in the Clarence, Richmond, and Tweed Districts; and was found as far north as Gympie, in Queensland.

Ptilorhis Victorie he met with at Rockingham Bay, and had received specimens from Trinity Bay (Broadbent), and Barnard Island, collected by Alexander Morton.

For the Cape York Rifle Bird, Dr. Gray had proposed the name of *Craspedophora Alberti*, and *Craspedophora Magnifica* was the well-known New Guinea bird. Mr. Ramsay illustrated his remarks by beautifully-preserved skins of males, females, and young of all the four species.

MONDAY, 25TH NOVEMBER, 1878.

W. J. STEPHENS, ESQ., M.A., President, in the Chair.

NEW MEMBER.

The Rev. J. E. Tenison-Woods, F.G.S., F.L.S., &c., formerly a Corr. Member of the Society, was duly elected.

DONATIONS.

Compte Rendu de la Societé Entomologique de Belgique. Serie II., No. 55; from the Society.

Quarterly Journal of Conchology; from the Editor, J. W. Taylor, Esq., Leeds.

PAPERS READ.

On six new species of ANNELIDS, belonging to the Family AMPHINOMIDÆ.

By WILLIAM A. HASWELL, M.A., B. Sc., Edin.

1.—AMPHINOME NIPIDA, *sp. nov.*

This species is a little over two inches in length, consisting of about forty segments of quadrilateral transverse section, be-

coming narrower anteriorly; the decrease in breadth beginning in front of the fifth setiferous segment. Posteriorly, the body tapers away slightly after the sixteenth segment; but the posterior extremity, though narrower than the middle of the body, is rather blunt than pointed. The caruncle is small, depressed, smooth, and somewhat cordiform in shape. From its anterior extremity arises the median tentacle, which is short and stout, and (in the spirit-specimen) of a red colour. The antennæ and palpi, which arise from the first somatic segment, are of a similar shape and colour; the palpi being somewhat shorter than the antennæ or tentacle. The prestomium is mesially grooved below, but not distinctly bilobed. The branchiæ, which commence on the third setiferous segment, are large and ramose, consisting of about four main branches, arising by a common root from the dorsal tubercle behind and internal to the dorsal fasciculus of setæ. These branches divide and subdivide—the ramifications ending finally with number of slightly dilated pinnules. The main branches are green in the spirit specimen, and the pinnules of the same bright red hue as the antennæ. The cirri, which are also of a red colour, are somewhat short, the ventral series being smaller than the dorsal. There are no post-anal appendages—a wart-like process representing them.

The dorsal setæ are nearly colourless, long, and fairly numerous. They consist of two distinct kinds:—one kind stouter and shorter; somewhat pointed, and possessing two rows of serrations; the other much finer and longer, free from serrations, and having near their extremity a joint or bend, from which they taper, with a slight curve, to a fine distal point. The ventral setæ are very much shorter than the dorsal, and usually only about four in number in each foot. They are stout, curved at the distal end, and finely pointed, resembling, in general form, the corresponding setæ in *A. rostrata* and *A. Jukesii* (Baird, Monograph of the Amphinomaceæ, Journ. Lin. Soc., vol. X., pl. IV.), but having the point much more acute. These setæ are dark-coloured, while the dorsal are transparent.

This species of *Amphinome* is the third described as occurring on the Australian coast, the other two being *A. rostrata*, Baird, and *A. Jukesii* Baird.

Hab. Cape Grenville. (Chevert Exped.)

2.—*AMPHINOME PRÆLONGA*, *sp. nov.*

This large species is about six inches long and half an inch in breadth, and the body contains forty-six segments, of quadrilateral transverse section. The caruncle is very small, and not well-preserved in the specimens. The tentacle, antennæ, and palpi are stout, dark-coloured. and sub-equal. The branchiæ, which begin on the third setiferous segment, are blackish, with lighter grey stems, and very bushy and large.

The dorsal setæ are of two kinds:—those of the one variety are long, and stout, and straight till near the extremity, when they begin to taper, and end in a fine point, the terminal tapering portion being gently curved; those of the other variety are shorter, straight, and pointed, and are beset by two rows of minute teeth for some little distance below the apex. The ventral setæ, about a dozen in number in each foot, are long, stout, and smooth, with a hooked extremity, closely resembling in form the corresponding structure in the preceding species.

Hab. Katow, New Guinea. (Chevert Exped.)

3.—*NOTOPYGOS FLAVUS*, *sp. nov.*

This annelid is one inch in length, by two-and-a-half lines in breadth, and consists of thirty segments. It is oval and flattened, slightly pointed at both ends; the posterior extremity being the more acute. The caruncle is elongated and sinuous, extending over five segments. The tentacle is longer than the antennæ and palpi. The branchiæ, which begin on the fifth setiferous segment, are small and ramose. The anal appendages are short, club-shaped. The dorsal cirri are stout and short; the ventral about the same length, but more slender in form.

The dorsal setæ are of two kinds:—some are short, stout, and simply pointed; others are longer, and bifurcated at the extremity; the shorter branch being only about one-fourth of the length of the other, and having a bluntish apex; while the longer branch is slightly bent outwards from the angle of the fork, and is continued thence to its apex, without further curva-

ture, and without serrations. The ventral setæ have all the same form as the second kind of the dorsal. Both the dorsal and ventral fasciculi are of a golden yellow colour.

Hab. Darnley Island. (Chevert Exped.)

4.—NOTOPYGOS PARVUS, *sp. nov.*

The length of this species is a little more than half-an-inch, and its breadth about a quarter of an inch. Its form is oval and depressed; and the number of segments is about twenty-eight. It is characterised especially by the form of the caruncle, which has the appearance of a thick smooth posterior tentacle, its free extremity reaching as far back as the fifth segment. From the anterior fixed end of the caruncle arises the median tentacle, which is smaller than the antennæ, as are also the palpi. The eyes are large and subequal. Two black spots, close together, on the under surface of the narrow prestonium, have the appearance of an accessory pair of eyes. The branchiæ, which begin on the third segment, consist on each segment of a few simple filiform processes, usually seven or eight in number, arising in a transverse row from the dorsal tubercle. The dorsal cirri are almost uniform in appearance with these colourless branchial filaments. The anal appendages are short and tubercle-like.

The dorsal setiferous tubercle is broad transversely, and the setæ very numerous; the ventral setæ are fewer, and placed close together. All the setæ, ventral, and dorsal, possess the same form. They are straight, smooth aciculæ, bifurcated at the tip; the shorter branch being less than half the length of the other, straight, and rather blunt; the longer branch has a sudden bend outwards, opposite the apex of the shorter branch, and from that point tapers to the extremity, with a slight curve inwards.

The two species above described are referred provisionally to the genus *Notopygos*. This genus contains hitherto only two species—*Notopygos cimitus*, Grube, and *N. ornatus*, Grube; and one of the generic characters given by Kinberg is a slight serration on the inner side of the longer branch of the dorsal setæ. This serration is entirely absent in the case of the two species I

have described. Possibly the definition of the genus might be stretched to admit these new species ; but on the other hand, the second, which I have named *Notopygos parvus*, may not improbably turn out to be the type of a new genus.

Hab. Tacking Point. (Chevert Exped.)

5.—*CHLOEIA MACLEAYI*, *sp. nov.*

The length of this form is two and-a-half inches, and its breadth three-quarters of an inch, including the setæ of the feet. It is of oval depressed form, pointed at both ends, but more acute posteriorly. The caruncle is attached below to the first two setiferous segments ; but its posterior free extremity projects as far back as the hinder border of the third segment. It consists of a larger central and two smaller lateral longitudinal folds, each covered with transverse corrugations. Along the summit of the central fold runs an irregular dark line, continued forwards to the central antenna. The central antenna or tentacle, which arises from the anterior end of the caruncle, is much larger than the antennæ proper and palpi ; the antennæ are marked with an irregular longitudinal black stripe ; the palpi are shorter and stouter, and pale in colour. The cephalic segment is large and strongly bilobed inferiorly. On the ventral surface of the second setiferous segment, just in front of each angle of the mouth, is a large black spot on each side, and one or two smaller ones. The first two pairs of feet have each a black spot on their anterior surface ; in the third pair, this becomes a black line crossing the foot from without inwards ; immediately behind which, in the fourth and succeeding segments, appears a second and shorter line crossing the ventral tubercle in the same direction. The branchiæ, which begin on the fourth somatic segment, arise from the dorsal surface of the segments, internal to the dorsal bundle of setæ ; they are very large and finely pinnatifid ; the stout main stem being black, and the branches pale.

There is no such marked pattern on the dorsal surface of the body as in *Chlocia pulchella* and *C. flava* ; there is, however, one indistinct, broad, oblique, dark band internal to the branchiæ ;

and in the centre, two obscure dark spots, one behind the other.

The dorsal cirri are long and slender, with an irregular longitudinal black stripe; the ventral are somewhat shorter and colourless. The anal appendages are large, stout, cylindrical, and colourless.

The dorsal setæ are straight, and very long and stout. They are moderately blunt, and serrated near the apex; the serrations being between fourteen and twenty-one in number, and harpoon shaped. The ventral setæ are not so numerous as the dorsal; are very long, about equalling the dorsal in this respect, and are much more slender than the latter. They are bifurcated at the tip; the smaller branch being exceedingly short.

Hab. Cape Sidmouth. (Chevert Exped.)

6.—EUPHROSYNE MASTERSII, *sp. nov.*

The oval depressed body is an inch in length, half-an-inch in breadth, and consists of about forty segments. The dorsal integument of each segment is marked out into numerous polygonal areæ by striæ. On the ventral surface, just in front of the mouth, are two swollen lobes, consisting of the dilated oral ends of the two halves of the first somatic segment. On the ventral surface of the prestomium, in front of and between these lobes, is a black spot. The caruncle consists of a central midrib and two crenated lateral bars, between which and the midrib, on each side, is situated a smooth fleshy lobe. Rising from the anterior end of the midrib is a short stumpy process, representing the tentacle, and at its base are the single pair of eyes. The branchiæ are ramose, and arise by as many as nine or ten distinct roots from almost the entire breadth of the foot. The main trunks divide and subdivide to form dendroidal masses, the terminal twigs of which are slightly expanded and phylloid. Behind the long slit like anal aperture, situated on the dorsal surface, is a single, large, rounded anal appendage.

The setæ are, as is characteristic of the genus, all bifurcate. Those of the dorsal tubercles are numerous and free from serrations; the shorter branch is a mere tooth, about one-fourth of the length of the longer, which has a gentle curvature inwards

These increase in length ventrally; the outer setæ, *i.e.*, those nearer the dorsal surface—being very short. The ventral setæ, which are fairly numerous, are of two kinds; those of the one kind, of various lengths, are smooth and bifurcated; the shorter branch being well developed, of about one-third the length of the longer, which has a strong bend outwards, and terminates in a blunt apex. The others are fewer, and of a very unusual shape. They have a slender stalk of varying length, but always much shorter than the longest of the other variety, and divided by a longitudinal dark line. This stalk bifurcates, the branches being much stouter than the stem, and of somewhat complex form. The shorter branch is somewhat club-shaped, and curved slightly outwards to a blunt apex; the longer branch is narrower than the other at its base, but expands into an extremity with somewhat the form of a bird's head—the “beak” being turned outwards; the narrower stalk of this branch—representing the neck of the bird—follows the curvature of the smaller branch; and both the apposed borders are lined with a series of small serrations.

Hab. Darnley Island. (Chevert Exped.)

ESSAY ON THE ICHTHYOLOGY OF PORT JACKSON.

By COUNT F. DE CASTELNAU.

My intention is to give in this paper a list of all the species of bony fishes (*teleostei*) that have up to this day been observed in the great Harbour of Port Jackson, and in its immediate vicinity.

I know that this catalogue will be found very incomplete; it must only be considered as giving, as far as possible, the list of the sorts that have been quoted by authors as having been found at Sydney, and of all those I have, during a stay of nearly two years, been able to collect by daily visits to the fishmongers. Of those I have seen in a fresh state, I give a particular notice and a description of their colours, &c; this having generally been omitted by travellers; and most being only known from discoloured specimens in European Museums.